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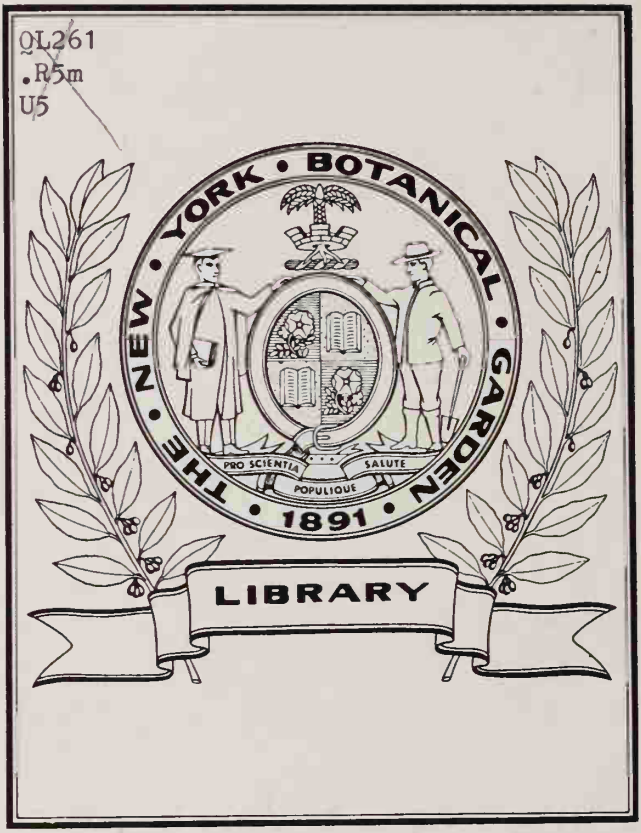
Growing Azaleas and Rhododendrons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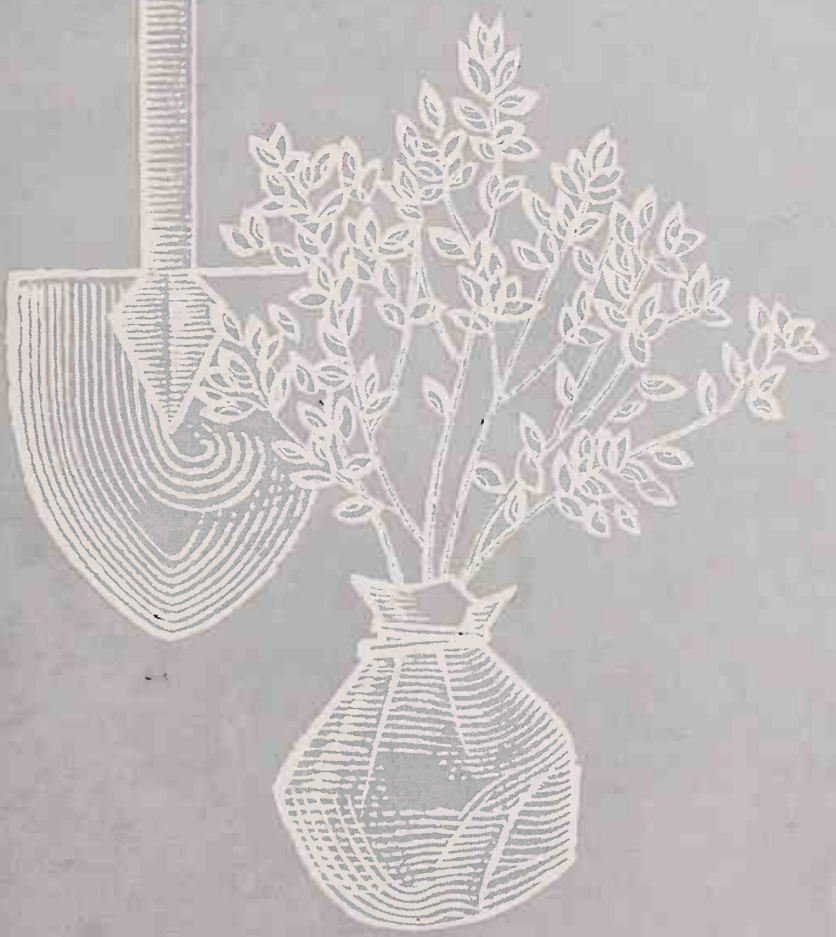
GROWING *Azaleas and Rhododendrons*



Home and Garden Bulletin No. 71
U.S. DEPARTMENT OF AGRICULTURE

GROWING AZALEAS AND RHODODENDRONS

Information for this publication was furnished by the Crops Research Division and the Entomology Research Division, Agricultural Research Service

Azaleas and rhododendrons are at their best in climates that are fairly mild and humid. They grow well throughout the Appalachian Mountains and in the States along the Atlantic and gulf coasts. They do well around Lake Erie, in the southern Mississippi Valley, and along the Pacific coast from Puget Sound to San Francisco Bay.

Soils or climate in the rest of the United States may be unfavorable for azaleas. Azaleas can be grown in unfavorable regions, but they need more attention than in favorable regions.

You can grow azaleas successfully if you follow these rules in planting and caring for them.

- Buy species and varieties that are adapted to your area.
- Get plants that are at least 2 years old and 8 to 16 inches tall.
- Plant them in well-drained, acid soil that is high in organic-matter content.
- Set plants no deeper than they were in the nursery.
- Maintain a mulch around them during the growing season.
- Guard against drought; be sure plants get the equivalent of 1 inch of rainfall every 10 days.
- Protect azaleas from insect attack.

BUYING PLANTS

Some kinds of azaleas will survive colder winter temperatures than other kinds. Some will withstand hotter summer temperatures than others. Before you buy azalea plants, be sure they are adapted to your area.

You can ask a reputable nurseryman in your locality to recommend species or varieties; generally, the plants he has for sale are adapted to your area. You also can ask neighbors which kinds have done well for them. Or you can ask your county agricultural agent or your State agricultural experiment station for species and variety recommendations.

Buy plants that are sturdy and well branched. The best size for planting is 15 or 16 inches tall. Small plants are winterinjured easily. If you get plants less than 8 inches tall, grow them in a coldframe for a year or two before you set them out. Plants more than 16 inches tall are satisfactory, but they are more expensive than 16-inch plants.

Azaleas and rhododendrons are members of the same plant group and have the same cultural requirements. All instructions in this bulletin for planting and care of azaleas may be applied also to rhododendrons.

Get balled and burlapped (B&B) plants—plants that have a burlap-wrapped ball of soil around the roots. These do not dry as easily as bare root plants, and they are more easily established.

PLANTING TIMES

You can plant azaleas most successfully when they are dormant. In the North the best time to plant them is early spring, before new leaves start to grow. In the South they can be planted from fall to early spring, at any time the ground is unfrozen.

You also can plant or move azaleas while they are growing, though with more risk than while they are dormant. Many azaleas are sold in the spring while they are in bloom. These can be established successfully in the garden if they are protected carefully from drying after they are planted.

PLANTING SITES

Azaleas do not grow well in dense shade; they become spindly and bloom only sparsely. They will grow satisfactorily, however, in full sunlight or in moderate shade.

They grow best where they have alternating sunshine and shade and are protected from the wind. A good place to plant azaleas is under tall, deep-rooted trees such as oaks and pines. There, the mixture of sunshine and shade is good.

Do not plant azaleas under shallow-rooted trees such as elms and maples, however. These trees will use water and plant food needed by the azaleas.

Evergreen trees with low branches make good windbreaks and attractive backgrounds for azaleas. Closely planted shrubs are good also, if they do not encroach on the space needed for the azalea plants.

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Azaleas grow well in locations that are too shady for many other flowering shrubs. They also grow well in full sunlight.

If you are planting azaleas around a building, they will do best on the north and east sides of the building where they are protected from the hot afternoon sun. You can plant them on other sides of the building, but you will have to give them more attention to protect them from drying.

SPACING THE PLANTS

Spacing of azalea and rhododendron plants depends on the variety you plant and the effect you want.

Mature rhododendrons spread to 6 or 8 feet in diameter. Mature azaleas need 4 to 6 feet of space per plant.

Spacing is no problem for single plants; plant them far enough from other plants or from buildings so they will not be crowded when mature.

If you want a mass of blooms, set plants close together while they are young, then transplant them as they become crowded.

A good plan is to place small azaleas 2 feet apart. After 3 or 4 years, when they start crowding each other, remove alternate plants and replant them in another location. This will give remaining plants room to develop.

PREPARING THE SOIL

Prepare the planting site several weeks in advance of planting. Prepare beds to spade depth or dig individual holes at least 18 inches in diameter and 12 inches deep.

Azaleas need acid soil that holds moisture and is well drained. Adding organic matter of the right type—peat moss, 1- to 2-year-old oak leaves, or forest leafmold—increases soil acidity and improves waterholding capacity of sandy soils and drainage of clay soils.

If your soil is neutral or alkaline, organic matter may not add enough acidity. Then it is necessary to make the soil acid with chemicals or grow the plants in tubs or planters that contain suitable soil.

Azaleas grow well in pure peat or leafmold; use as much as you can afford.

If you are preparing planting beds, spread a layer of organic matter 4 or 5 inches deep over the surface of the spaded bed. Mix the organic matter with the upper 6 inches of soil.

If you are preparing separate planting holes, mix the soil from the hole with an equal volume of organic matter.

After you have added organic matter to the soil, the surface of the bed or planting hole will be higher than the surrounding soil. If the soil is heavy and your area has frequent hard rains, leave the surface mounded; it will help drain away excess water and keep the beds from getting waterlogged. Under normal conditions, level the beds or planting holes.

SETTING THE PLANTS

Dig planting holes larger than the rootballs of the azalea plants. After you set each plant in a hole, cut the twine around the rootball. It is not necessary to remove the burlap; it rots quickly. If other materials are used as wrapping, remove them.

Press soil around the rootball. Pack it firmly under the plant. While you are doing this, set the plant so it is no deeper that it was in the nursery. If the roots are planted too deeply, they will not get enough air, and the plant will die.

After you fill the hole, soak the soil thoroughly. This helps to bring the soil into close contact with the roots.

MULCHING

As soon as you have the plants set, mulch the soil around them with oak leaves, peat moss, pine needles, or leafmold.

Use at least 2 inches of peat moss or pine needles or 2 to 5 inches of

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Press soil firmly under the rootball to set the plant at the proper level and to keep it from settling.

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Apply a mulch of oak leaves, pine needles, or peat moss around the newly set plant.

leaves or leafmold. Spread the mulch so all the soil is covered beneath the branches.

If the plants are not sheltered by nearby buildings, shrubs, or trees, remove the mulch at the onset of cold weather. If they are growing in sheltered locations, the mulch can remain in place.

Add new mulching material every spring.

WATERING

Be sure the plants get enough water. They should have the equivalent of 1 inch of rain every 10 days. You can be safe in applying about 2 gallons of water to each plant every 10 days from spring to late fall. Omit watering for 10 days after heavy or prolonged rains.

Watering is essential during the first 2 years after planting. After azaleas become well established, they usually will survive with normal rainfall.

If you plant azaleas under overhanging eaves or where rain does not reach them, you will have to supply all their water. If this is the case, continue watering through the winter, whenever the ground is not frozen.

FERTILIZING

Azaleas may need light fertilizing soon after planting. Apply fertilizer in early spring.

After the first season, organic matter usually furnishes enough nutrients to the plants. If the plants need fertilizer, their leaves begin to turn light green.

Garden stores sell fertilizer formulated especially for azaleas. Apply it according to the directions on the package.

Do not apply fertilizer after July 1.

Do not use special lawn fertilizers on azaleas. These fertilizers often are alkaline.

PRUNING

Azaleas grow well without pruning. You may want to prune them, however, to remove dead or injured branches, to shape the plants, or to reduce their size.

If you want your plants to be bushier, cut growing twigs half way back when they are 4 or 5 inches long.

Acidity Testing

To determine whether your soil is acid enough for azaleas, have it tested or test it yourself.

Your State agricultural experiment station will test your soil and give directions for changing the soil's acidity, if necessary. Ask your county agricultural agent how to prepare the soil sample or write to your State agricultural experiment station for this information.

You can make your own test for soil acidity with testing kits sold by garden supply stores. These kits are inexpensive and easy to use.

Plants that have grown too tall or are crowded can be pruned back severely to the size and shape you want. The plants will not have many flowers the next season after pruning, but in following years the flowers will be more abundant.

WEEDING

A heavy mulch prevents weeds from growing readily around plants. Hand pull those weeds that do manage to grow. Do not cultivate with a hoe or other garden implements. Azalea roots grow close to the surface and will be injured if the soil is disturbed.

CONTROLLING INSECTS

If your azaleas or rhododendrons are damaged by insects or related pests (for example, spider mites), determine the kind of pest responsible for the damage, then apply an appropriate insecticide. Without protection against insects, the plants will not thrive.

The azalea lacebug and spider mites are particularly troublesome, and are discussed below. The insecticides recommended for controlling them are available at garden-supply stores.

For information about other pests that attack azaleas and rhododendrons, see Agriculture Information Bulletin 237, "Controlling Insects on Flowers," available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402, at 40 cents a copy.

Each year, the U.S. Department of Agriculture receives thousands of requests for information about growing flowers. In an effort to comply with these requests efficiently, the Department has prepared a series of publications on the flowers that are most frequently the subject of inquiry. This bulletin is one of the series.

Azalea Lacebug

Adults are about 1/8 inch long and have lacy wings and brown and black markings. The young, called nymphs, are spiny; they are colorless at first, then become black.

Adults and nymphs suck sap from the underside of leaves. This causes the upper surface to have a gray, blanched, or coarse-stippled appearance, and reduces plant vitality. The underside of leaves becomes discolored by excrement and cast skins. Plants in the sun are more severely damaged than those in the shade.

Control.—Dust or spray with lindane or malathion.

If you wish to apply a dust, purchase a 2-percent lindane dust or a 4-percent malathion dust. The dust is ready to use when purchased. Apply an even, light coating, at the rate of 1 ounce to each 75 square feet of border area, or to each 30 feet of row. See that the dust reaches both sides of each leaf—force it through the foliage.

If you wish to apply a spray, purchase the desired insecticide in the form of a wettable powder (WP) or emulsifiable concentrate (EC) and mix it with water in the following proportions:

Insecticide and formulation	Amount of product to mix with 1 gallon of water
Lindane:	
20-percent EC	1 teaspoon.
or	
25-percent WP	1 level tablespoon.
Malathion:	
57-percent EC	2 teaspoons.

Apply 1 quart of spray to each 75 to 100 square feet of border area, or to each 50 feet of row.

Whether you dust or spray, time the first application to destroy young nymphs about June 1 in the North, and earlier in the South. Repeat application in 10 days, again several weeks later, and if necessary throughout the summer.

Spider Mites

Adults and young of these tiny mites—they are barely visible to the naked eye—are found on the underside of leaves. They are red or greenish red.

First signs of infestation are yellow, stippled areas on leaves, and fine webs on leaves and flowers. Entire leaves become yellowed, gray, or brownish. Flowers are discolored and faded. Injury usually appears in June or later.

Control.—Spray with dimethoate, Kelthane, or tetradifon once a week for 3 weeks. Purchase the desired insecticide in the form of a wettable powder (WP) or emulsifiable concentrate (EC) and mix it with water in the following proportions:

Insecticide and formulation	Amount of product to mix with 1 gallon of water
Dimethoate: 23.4-percent EC	2 teaspoons.
Kelthane: 18.5-percent EC	1 teaspoon.
Tetradifon: 25-percent WP	1 level tablespoon.

Apply spray in the amount stated under "Azalea Lacebug."

Syringe plants frequently with a forceful spray of water to wash off mites and to break webs. Destroy chickweed, mustard, and other weeds on which spider mites overwinter. Avoid planting such overwintering mite hosts as foxglove, hollyhock, and violets among azaleas.

Trade names are used in this publication solely for the purpose of providing specific information. Mention of a trade name does not constitute a guarantee or warranty of the product by the U.S. Department of Agriculture or an endorsement by the Department over other products not mentioned.

CONTROLLING DISEASES

Many troubles with azaleas and rhododendrons are caused by planting varieties that are not adapted or by taking improper care of the plants. However, the diseases discussed below may affect plants that have been well cared for.

Flower Spot

Flowers become spotted, then limp. All flowers on the plant are quickly destroyed. Spray with zineb, prepared as directed by the manufacturer, two or three times a week during the flowering season.

Tip Blight or Die-Back

Starts with light-brown blotches on the leaves. May spread down the leaf stalk into the branch. Branch dies. Cut off diseased branches below brown discoloration. Remove faded flower clusters. Spray the plant with bordeaux mixture (4 ounces copper sulfate and 6 ounces hydrated lime in 3 gallons water) immediately after the flowers fade.

PRECAUTIONS

Insecticides are poisonous. Use them only when needed and handle them with care. Follow the directions and heed all precautions on the labels.

Keep insecticides in closed, well-labeled containers in a dry place. Store them where they will not contaminate food or feed, and where children and pets cannot reach them.

In handling any insecticide avoid repeated and prolonged contact with the skin or prolonged inhalation of dusts or mist. Wash hands and face before eating or smoking.

Bordeaux mixture, Kelthane, malathion, tetradifon, and zineb can be used safely without special protective clothing or devices if they are in a diluted dust or spray form. However, if they are in concentrated form they require special precautions. Avoid spilling concentrates on the skin. Keep them out of the eyes, nose, and mouth. If you spill any on skin or clothing, wash it off and change clothing immediately. If a concentrate gets in your eyes, rinse them with plenty of water for 15 minutes and get medical attention.

Dimethoate and lindane can be absorbed through the skin in harmful quantities. When working with these insecticides in any form, take the same precautions as with concentrates.

To protect fish and wildlife, do not contaminate lakes, streams, or ponds with insecticide. Do not clean spraying equipment or dump excess spray material near such water.

Avoid drift of insecticide sprays or dusts to nearby crops, livestock, or bee yards.

Leaf Gall

Pale-green or whitish fleshy galls grow on leaves or flowers. Hand pick the galls. Spray with zineb prepared as directed on the package.

Leaf Scorch

Leaves have yellowish spots with brown centers and reddish borders. Leaves drop off and plant is weakened. Apply zineb in spring and fall.

Iron Chlorosis

Leaves turn light green or yellow between the veins, but the veins remain green. Plants lack iron, usually because of weak soil acidity. Watering with "hard" water reduces acidity. Rain washes lime from masonry walls into azalea plantings nearby and lowers soil acidity.

May be caused also by excess acidity.

Can be checked temporarily by spraying the foliage with 1 ounce of ferrous sulfate in 1 gallon of water. Soil acidity must be changed for longer lasting control. Consult your county agricultural agent or your State agricultural experiment station for control recommendations.

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